



PUBLIC LEADERSHIP, STEWARDSHIP, COMMITTMENT

# Leading by Example Council and DCAMM Accelerated Energy Program Meeting

January 12, 2016

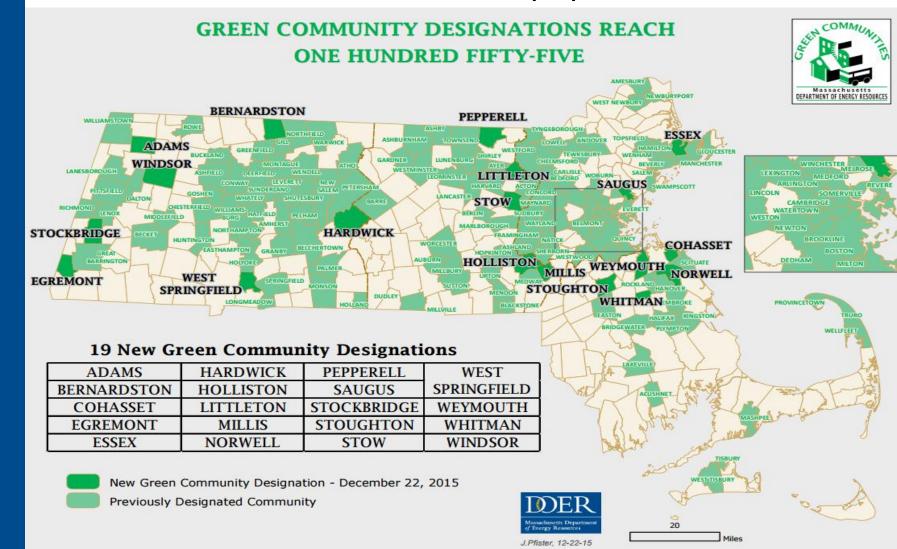
# **Agenda**

- Welcome and Introductions
- MA Policy Updates
- DCAMM AEP Updates
- Statewide Contract PRF62
- Zero-Emission Landscaping Equipment
- LBE Updates
- Upcoming Events
- Roxbury Community College Energy Project



# **New Green Communities Designated**

- 19 new communities designated, now totals 155
- 54% of the Commonwealth's population



## **Staffing Updates**

# New DOER Deputy Commissioner for Energy Policy, Planning, and Analysis

- Joanne Morin, started December
- LBE now sits within DOER Policy and Planning Group



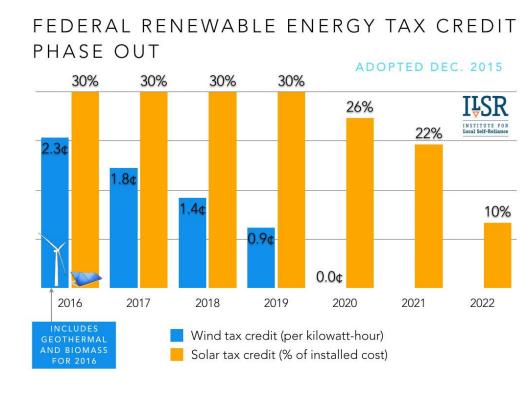
### **DOER Director of Emerging Technology Job Posting**

 Will lead DOER policy efforts and programs related to energy storage, clean energy resiliency, electric and alternative transportation fuels and infrastructure



# **Energy Investment Tax Credit (ITC) Extension**

- Federal tax credit extended for clean energy technologies:
  - Solar: 30% through 2019, 10% in 2022
  - Wind:\$0.023/kWhthrough 2016,expires 2020
  - Geothermal,
     marine, small
     hydro: 30%
     through 2016



Source: <u>US Dept. of Energy, 2016</u>



### **Energy Legislative and Regulatory Updates**

Issues potentially to be addressed this spring:

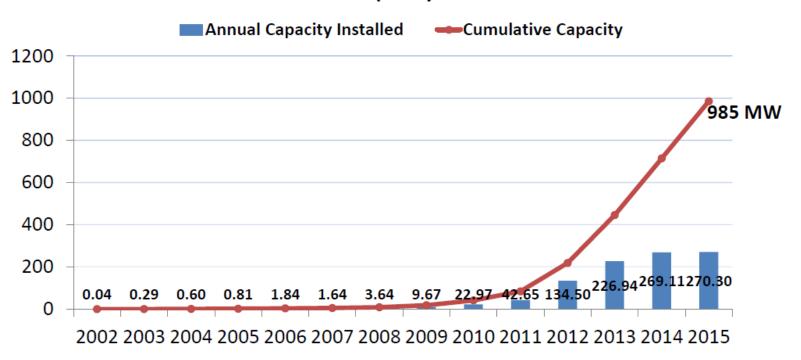
- Net metering caps
- Net metering credit structure and values
- Solar Incentive structure and amounts
- Long-term procurement of large scale renewable, including hydropower & off-shore wind
- APS draft regulations for renewable thermal
- DOER energy storage study completed in March

Possible omnibus energy legislation



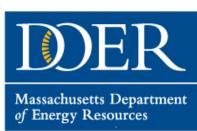
# **Solar Updates: Statewide Progress**

#### **Installed Solar Capacity in Massachusetts**



Massachusetts has an aggressive target of 1600 MW of solar power installed for 2020. The above figures represent the cumulative amount installed as of November 2015, in 35,937 projects.

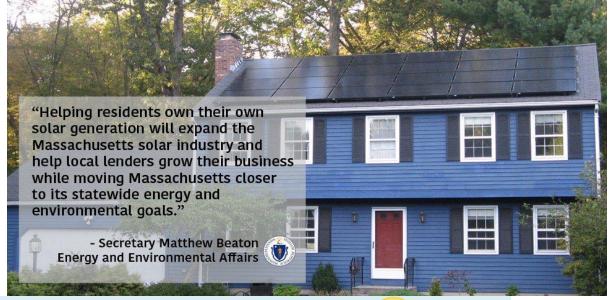
Expect to hit 1 GW Shortly



## Solar Updates: Residential Solar Loan Program

- \$30 million program launched in December
- Will support MA lenders in providing low-interest and fixed-term loans between \$3,000-\$60,000
- Project approx. \$100 million in savings
- Support local installers and increase net benefit to

homeowners





## **Solar Updates: PV Inspections Contract FAC91**

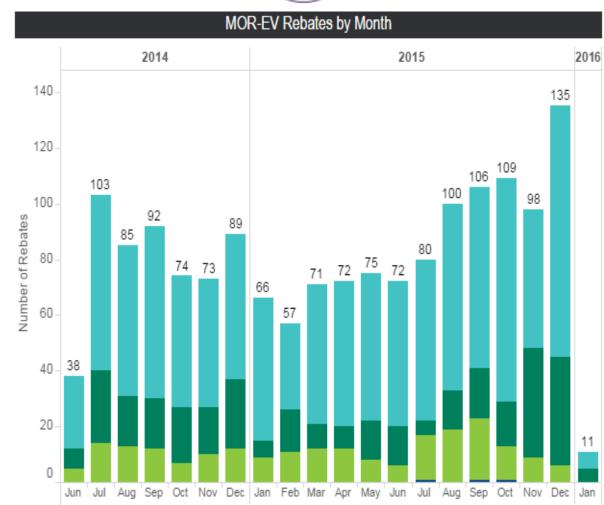
- New Statewide Contract to procure two levels of Solar PV inspections
  - Annual visual inspections
  - Comprehensive inspections
- Two approved vendors, pre-negotiated pricing for various system sizes
- Vendors may perform minor repairs under \$10,000
- Search "FAC91" on COMMBUYS or contact <u>James</u>
   <u>Freeley</u> (DCAMM) for more information



# **Electric Vehicle Rebate Program**

- 1,606 rebates and \$3.7M in rebates issued or reserved
- Battery Electric Vehicles most common
- Applications still being accepted





PHEV+

PHEV

(As of 1/4/16)

Vehicle Category:

### **Environmentally Preferable Winter Products**

#### **Snow and Ice Melt Products**

- EPA Safer Choice registered melt products available on FAC76 (Cat. 7) and FAC85 (Cat. 7)
- Use less or no sodium chloride (salt) and restrict soil and water contaminating chemicals

### **Antifreeze**

100% recycled product available on SWC VEH96

### **Heating Oil**

• B5 Bio-heating oil with 5% bio-fuel from raw materials (e.g. vegetable oils) on SWC ENE34 (No. 2 Heating Oil)



### **RecyclingWorks Food Donation Information**

- New <u>Food Donation</u>
   <u>Guidance</u> posted online
- Established after 3 MA stakeholder meetings
- Food storage needs chart
- List of resources, documents, laws, and donation organizations



recyclingworksma.com/donate/

Businesses and institutions donate surplus food



Food banks and food rescues sort, store, and redistribute surplus food to agencies



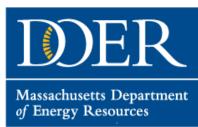
Agencies serve meals made from surplus food items to those in need



Food insecure individuals recieve nutritious, good quality food



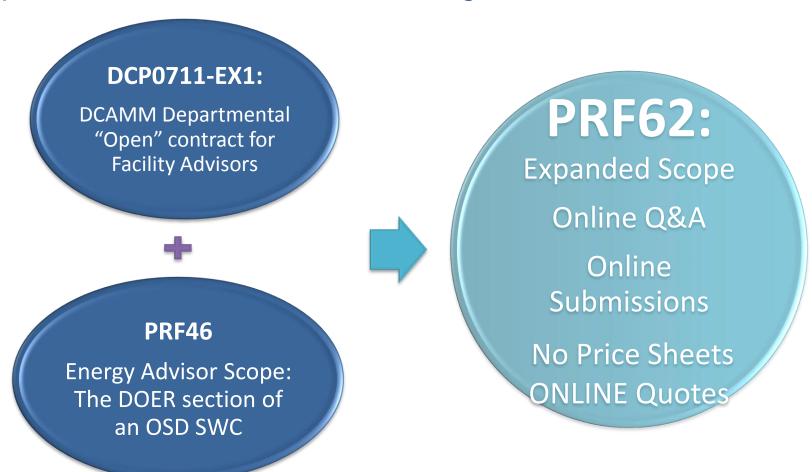
# DCAMM AEP Updates



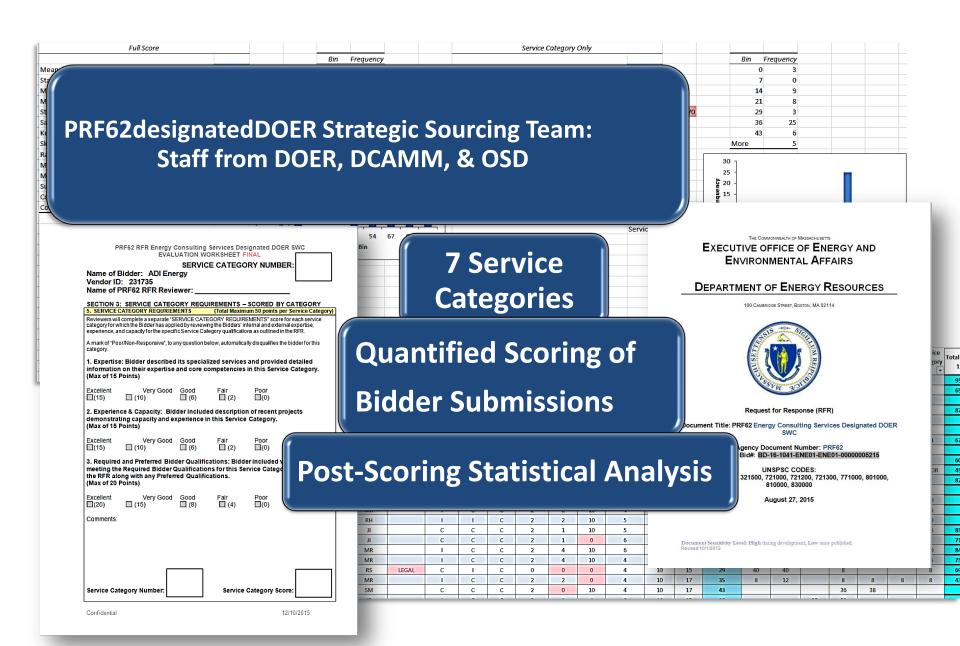
### **New Energy Consultant Statewide Contract**

# PRF62 Energy Consulting Services Designated DOER SWC

Replaces and combines two existing contracts:



#### PRF62 Energy Consulting Services Designated DOER SWC



### **PRF62 Service Categories and Scope Overview**



250-word descriptions provided for each vendor in each service category

### **Energy Research and Analysis Services**

- Energy Policy and Program Research & Analysis
- Energy Regulation Research & Design Services
- Energy Markets Forecasting & Analysis
- Utility Efficiency Program Design & Implementation
- Financial Analysis
- Staffing Research & Analysis
- Capital Investment & Maintenance Planning/Life Cycle Cost Analysis
- Energy Related Data Collection & Analysis Services



# Clean Energy Systems and Technology Analysis and Research

- Renewable & Efficiency Technology Research & Analysis
- District Energy Systems, Energy Storage, Grid Interconnection,
   Demand Reduction & Microgrid Strategies
- Sustainable Design & Water Conservation Technology
- Other Clean Energy Technology Analysis/Review Including Emerging & Innovative Technologies



# **Energy Programs Stakeholder Engagement Services**

- Managing Public Stakeholder Processes, Training, & Education
- Stakeholder Engagement, Dialogue Facilitation
- Behavior Modification Measures or Programs
- Public Hearings, Outreach, Facilitation, Education
- Social Networking
- Facility Systems Training
- Other Training & Stakeholder Outreach



# **Energy Project Advisory & Consulting Services**

- Energy & Water Audits, Energy Master Planning, Waste Water Planning
- ZNE Analysis
- Energy Modeling
- ECM Specifications & Scopes Of Work
- Energy Project Management Support
- Performance Contracting Oversight & Advisory Services
- Training Oversight
- Sub-consultant Services For Energy/Water Diagnostic Testing

47
Companies
Provisionally
Awarded

### **Existing Building Commissioning (EBCx)**

- Energy Audits & EBCX Investigations
- Current Facility Requirements (CFR) Documents
- Energy Management Systems (EMS) Evaluation
- ECMs: Low Cost & Low Capital Options
- EBCx Implementation Oversight
- Continuous Commissioning
- Sub-consultant Services For Diagnostic Testing



# Facility Maintenance and Operations Advisory Services

- Facility Maintenance & Operations Advisory Services
- Facility Condition Assessment
- Facilities Training Programs
- Facility Operations & Management Process Improvement
- Staffing Research & Analysis
- Sub-consultant Services For Diagnostic Testing

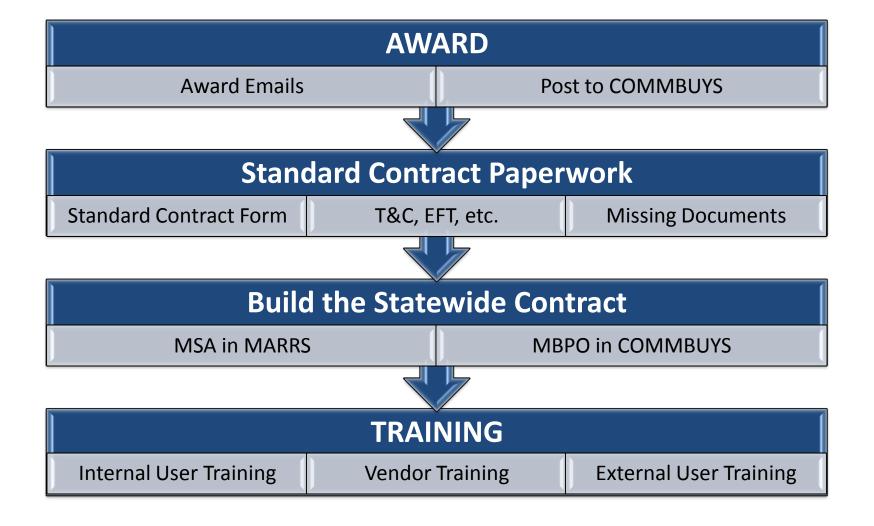
22
Companies
Provisionally
Awarded

# High Performance Buildings Advisory Services

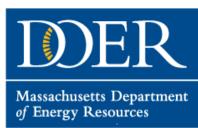
- LEED Certification Advisory Services
- Sustainable Design Research & Project Support for:
  - Passivehaus, ZeroNetEnergy, Living Building Challenge, etc.
- Document Production
- Training Support for LEED, High Performance Building Operations,
   Sustainable Design, and Resiliency Programs & Projects
- Resiliency Advisory Services



### **PRF62 Next Steps**



# LBE Updates



# **Statewide Vehicle Contract (VEH98)**

- Over 500 light-duty vehicles including passenger cars, SUVs, Vans & Pickups
- Currently: Ford, Chrysler, Chevrolet, Honda, Nissan (Toyota & Hyundai coming soon)
- More options for alternative fuels, battery electric and highly efficient gasoline vehicles
  - 6+ PHEV/BEV options
  - Small pickups
  - Hybrid Upfits for cargo & pass vans





#### **Contract User Guide:**

(http://www.mass.gov/anf/docs/osd/uguide/veh98.pdf)







- LBE working w/ ICF, Inc. to study the feasibility of solar canopies on parking lots at 22 state facilities, including Higher Ed (9), Tewksbury Hospital, and DCR (12)
- Three Phases:
  - ✓ Task 1 Complete (fatal flaw 18/22 sites progressed)
  - √ Task 2 Complete (interconnection & net metering)
  - √ Task 3 Complete (cost & generation estimate)

#### **Current Timeline**

- December 18: Hosted webinar for site contacts
- January 22: Final report due
- February: One on one meetings w/sites
- March: Recommendations to EEA

# LBE Tracking

As of January 1, 2016:

22 Agencies and Campuses submitted Tracking Forms – THANK YOU!

	Berkshire Community College	Massasoit Community College
	Bridgewater State University	MassBay Community College
	Bristol Community College	Mt. Wachusett Community College
1	Bunker Hill Community College	North Shore Community College
	Department of Fire Services	Quinsigamond Community College
	Fitchburg State University	Soldier's Home Holyoke
	Framingham State University	Springfield Tech. Community College
	Greenfield Community College	Trial Court
	Mass. Maritime Academy	UMass Dartmouth
	Mass. Port Authority	UMass Lowell
	Mass. Water Resources Authority	UMass Medical School

Massachusetts Department of Energy Resources

# **Solar Canopy Grant Program**

Grant opportunity for solar PV at parking lots, garage roofs, and pedestrian walkways on state owned land

- ❖ \$0.75/ watt up to \$600,000 per project for systems owned & operated by the Commonwealth
- ❖ \$0.50/ watt up to \$500,000 per project for systems owned by a third party



Massachusetts Department of Energy Resources

# **Solar Canopy Grant Status**

#### **Grants Awarded**

Total: \$1,023,890

- UMass Amherst Visitor Center (292kW)
- DCR Walden Pond (105.84kW)
- Roxbury Comm. College Parking Lot (937kW)
- Feasibility Studies at 22 sites

# **Grants Under Review**

Total: \$396,360

- MWRA Deer Island (491.4kW)
- UMass Lowell South Parking Lot (200.88kW)

#### **Additional Grants**

Potential Total: \$1,010,500

- UMass Amherst (4MW)
- MBTA Wonderland (238kW)
- MassDOT Worcester (544kW)

Remaining
Funds in Grant
Opportunity:
\$69,250

# **Renewable Thermal Grant Program**

Grant opportunity for renewable thermal feasibility studies and technology implementation (PON-ENE-2015-017 & PON-ENE-2015-018) **expired December 31, 2015** 

#### **Pending Applications:**

- DCR:
  - > \$110K for Biomass at Blue Hills
  - \$338K for Biomass & ASHP at 4 sites (Leo J. Martin, Scusset Beach Garage, Halibut Point & Myles Standish)
- MassDOT
  - > \$15K for geothermal feasibility study
  - > \$500K for ASHP/GSHP
- Mass College of Liberal Arts (MCLA)
  - \$300K for combined heat & power (CHP)







# **EEMS/Building Energy Intelligence Updates**

- In final steps of procurement process – vendor award likely in January, 2016
- DCAMM leading next-phase, with DOER as partner
- Reviewing final information and conducting final evaluation



### **MAFMA University: Training Updates & Survey**

- MAFMA Training Committee working to update training & certifications programs
- Training needs survey open until Jan. 29
- Potential new certifications:
  - Facility Safety
  - Facility Systems
  - Facility ProjectManagement
- New training programs expected to begin this fall





# **Upcoming Events**

- RecycleMania 2016:
  - Registration: Profile Info. Survey Deadline 1/22
  - Tournament: Preseason starts 1/24, Week 1 starts 2/7
- MassDEP Solid Waste Advisory Committee
  - 2/4 in Boston or by webinar from 1:00-3:00pm
- OSD MassBUYS Expo 2016
  - 4/28 in Foxborough from 8:00am-4:00pm
- Earth Day is 101 days away!
  - o Friday 4/22, have you started planning?



# Roxbury Community College Energy Project

